

# Hemispheric IP Video Door Station



The HiRes Video Company

**MOBOTIX**



Complete Panorama view

Recording with sound

Two-way video worldwide

Integrated messaging features

Keyless entry

Simple installation



Complete Panorama view from wall to wall and from floor to ceiling

## HiRes Video Innovations

The German company MOBOTIX AG is known as the leading pioneer in network camera technology and its decentralized concept has made high-resolution video systems cost efficient.

MOBOTIX AG • 67722 Langmeil • Tel: +49-6302-9816-103 • Fax: +49-6302-9816-190 • sales@mobotix.com

# Hemispheric IP Video Door Station



T24M Hemispheric camera

Keypad entry

Info/Mx2wire



## **Hemispheric camera** with LEDs

- Real intercom feature
- Lip-synchronous sound
- Event-controlled recording
- Outdoor light and doorbell buttons



## **Keypad** backlit

- Keyless entry with transponder or PIN
- Check/leave messages
- Open/lock door
- Modules can also be installed individually



## **Info module** backlit

- With Mx2wire unit (optional)
- Data transfer and power supply via two-wire connection
- Instead of network cable
- For two-wire cables up to 200 m

## **A Module System Made in Germany**

The camera module can be used as a compact basic video door station thanks to the integrated doorbell and light buttons. Modules can be combined in different ways upon request. MOBOTIX offers solutions for one, two or three modules as flush-mounted or on-wall models.

## BETTER OVERVIEW. INCREASED SECURITY. MORE POSSIBILITIES.

The new T24 IP Video Door Station from MOBOTIX offers an innovative, powerful solution that is easy to install and that has never been available to the market until now. In addition the T24 is based on the international video telephony standard VoIP/SIP and H.264.

All of the modules offered for outdoor use are weatherproof, maintenance-free and can be used in temperatures ranging from **-30 to +60°C (-22°F to 140°F)**. The most important system advantages at a glance:

### Allround View With No Blind Spots

With 3.1 megapixels and internal memory, this Hemispheric door camera records the entire entrance area. No blind spots, from wall to wall and from floor to ceiling.

### Two-Way Video Around The World

When the doorbell rings, a connection is established with an IP video phone or a standard computer via the network. For two-way video and for opening the door.

### Recording With Sound

The camera in the door station can record events automatically. For example, when someone rings the doorbell or if something moves in front of the door.

### Keyless Entry

Who has access when? The door opener can be controlled, simply and securely, using the keypad module with a PIN code or using an RFID transponder.

### Integrated Message Function

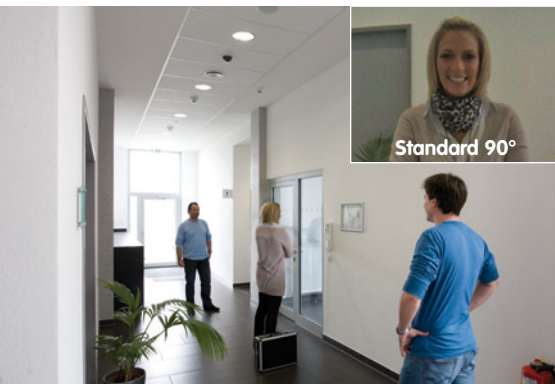
Digital voice messages can be left at the door station and played back by pressing the doorbell or after entering individual authentication.

### Very Simple Installation

The station is connected to the door via an Ethernet cable or via two bell wires thanks to Mx2wire technology. The T24 modules can also be upgraded with Siedle Vario systems.



# Allround View With No Blind Spots



Entire scene in one view with the T24

## Hemispheric HiRes Camera

Thanks to the Fisheye lens with its 180° image angle, the camera records the entire entrance area without mechanical panning or tilting – **without any blind spots, from wall to wall, floor to ceiling**. It is not possible to "sneak past" this camera. The current image section can be switched in seconds on the monitor located at the remote station: from a close-up of the visitor all the way to an overview panorama.

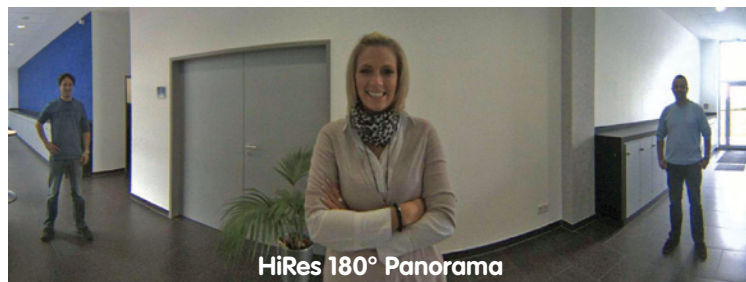
The T24 has an integrated high-performance computer, just like the MOBOTIX security cameras used in banks and airports. This enables the IP Video Door Station to start recording video and sound automatically when motion is detected while sending a message to the property owner or security company via text message or email.

## Superior Overview Increases Security

The Fisheye lens of the camera records the entire hemisphere of the scene in front of the lens without any blind spots and displays this image in the first step as a 360° full image. For technical reasons, the geometric shape of the objects is heavily distorted, particularly at the edges of the image, making them difficult for the human eye to evaluate. For this reason, the camera uses its integrated software to correct the images



T24 360° Full Image



Original MOBOTIX T24 Image – 1280 x 480

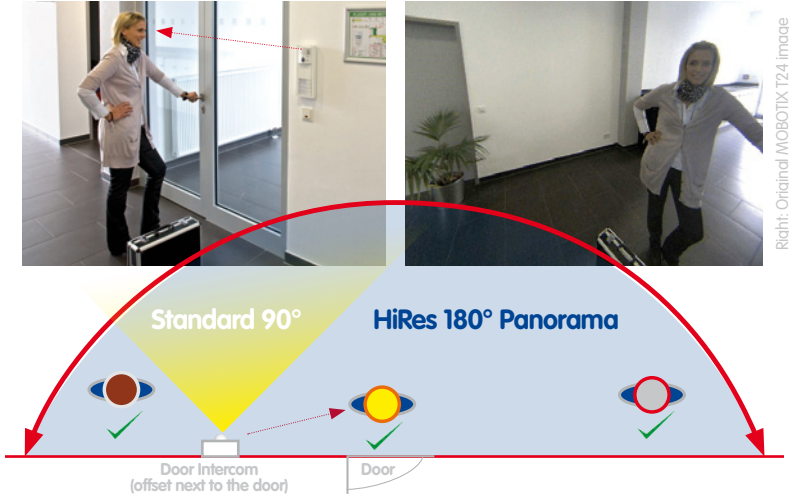
already in the live view so that it can deliver user-friendly images at the remote video station. The images can now be **digitally tilted, panned and zoomed into** from the comfort of the remote station.

## Perfect Overview

The T24 enables a hemispheric 360° Panorama view. The camera records the entire entrance area in wide range and without any blind spots. The fisheye effect, which is typical for this lens, can be switched off digitally in the live image.

### 180° Image Angle Coverage With No Blind Spots

Conventional door cameras have a standard 90° lens, meaning that they are only able to record visitors if they stand directly in front of the lens. However, often times the door station cannot be mounted directly next to the door and is therefore offset to the visitor at the door (see drawing below). But even in this case, **thanks to its 180° image angle**, the T24 delivers perfect images.



### Direct Views Up And Down

The Hemispheric camera can do much, much more: it can record the area on the floor in front of the door, the often overlooked area directly underneath the door station. **The T24 does all of this using only its software – without any mechanical moving parts or motors**, silently, discreetly and without making the visitor feel "observed from bottom to top."



Also, this quick look down is incredibly practical when checking, for example, whether the daily paper is already in front of the door. Of course, it is also possible to look upwards up to under the ceiling as well.

### Virtual PTZ (vPTZ)

The image sections displayed here are corrected by the integrated image correction software. The virtual PTZ feature allows you to enlarge or move the image section just like a PTZ camera, but without the need for mechanical moving parts.

# Two-Way Video Around The World

## Easy operation

- Answer calls
- Open the door
- Switch light on/off
- Monitor recordings



Download MOBOTIX MxEasy, free of charge at [www.mobotix.com](http://www.mobotix.com)

## Based On Internet Technology

The T24 door station from MOBOTIX uses standard network technology and has a microphone and speaker. When the doorbell rings, a connection is established with an IP video phone or a standard computer via the network. Not only can you access the video and sound from the door station from every room in the house, you can also access the camera from anywhere in the world. And most importantly, visitors and property owners can both speak at the same time with the best possible sound quality thanks to the echo elimination and digital signal processing.

## As Many Remote Stations Needed

Thanks to the use of network technology, the T24 is not bound to just one expensive, manufacturer-dependent remote station. Upon request and depending on your particular needs, the door station can be operated and controlled using a **standard computer**, an **IP video phone** or a **tablet computer**.

## Simple Use With MxEasy

The convenient MxEasy software was customized by MOBOTIX especially for simple and user-friendly operation of the T24. This free-of-charge program, which is available for download on the



Simultaneous live view (top) and vPTZ view (bottom) – MxEasy

## Overview And vPTZ Simultaneously (Live And Search)

The user interface software MxEasy delivers a live video image with two windows as a standard. While the top window remains unchanged and continues to focus on the visitor, the image section in the bottom window can be changed as desired.

MOBOTIX website, turns any computer (Macintosh or Windows) into a multifunctional T24 remote station with a graphical, intuitive user interface in no time at all.

### A Practical Example

With the T24, the Wiseman family from Frankfurt am Main, Germany, always have a clear picture of who is at their door. They installed a modern IP video phone on the ground floor of their house as a remote video station. Using the buttons on the phone, they can quickly and easily control the camera, change the image section through digital panning, tilting and zooming functions, open the door, switch on the light and call up recorded images.



Mr. Wiseman has also set up an additional remote station on the computer at his office in Wiesbaden, Germany. **A connection, which includes live video, is established automatically via the Internet whenever someone rings the doorbell and no one is at home.** This way, Mr. Wiseman can see the visitor even from his office and speak with him or her, click a button to open the door to let the person inside, for example, if his children have come home from school earlier than expected.

For more information about operating a video phone, see pages 18/19



In addition, the family uses a tablet PC, which they leave on the table next to the couch in the evening, allowing family members to speak with the visitors at the door from the comfort of their living room. The family also brings the tablet PC along on vacations so that even from New York, they can communicate live with the visitors at their house in Frankfurt.

### Multi-Purpose Video Phone (video: H.264, sound: G.711)

The T24 can be connected to any suitable video phone in the world. In addition to supporting the intercom feature with video and sound, these devices support additional features such as door/light control, image search, quick recording and PTZ functions.

# Recording With Sound

## Camera-Internal Memory Up To 32 GB

The T24 saves high-resolution video with **lip-synchronous sound** directly to the integrated MicroSD flash card, without requiring an external storage device or PC, therefore using no additional network load. Old recordings can be overwritten or deleted automatically after a specified period of time.

A 32 GB MicroSD card can record up to **400,000 Panorama images** or **33 hours of video**. Flash storage is a mature semiconductor memory technology without any moving parts (and without a mechanical hard drive), and its reliability, simple operation and low costs have made it the storage medium of the future.

The MOBOTIX FlashFile system (MxFFS) prevents unauthorized persons from reading or transferring the internally stored data, even if the card is stolen.



Factory-installed 4 GB MicroSD card

## Full Image Recording Independent Of Live Image

The Hemispheric T24 has a virtual PTZ feature (pan/tilt/zoom). The live image from the Hemispheric camera can be smoothly enlarged, and you can simultaneously zoom in on any section of the image using a joystick, for example. This is similar to a mechanical PTZ camera, but without the maintenance and wear.



Live image



Stored full image



Analysis in the stored full image

While the live image is zoomed in on a particular area of the image, the camera will continue to record the full image at the same time. This is not possible with any motorized PTZ camera in the world. But it is extremely important for a later research in the recorded events ("Look, there was someone below by the door as well!")

## Choose Your Storage Location

Each T24 can be configured so that the camera records either to the internal MicroSD card or to an external network using secure encryption. You can also select the normal hard drive of the PC as the storage location for the camera.



## Automatic Event Recording

As the leading manufacturer of high-resolution IP security cameras, MOBOTIX has integrated all of the necessary features also into the T24 door camera. The recording function must be switched on and off manually for standard cameras, whereas MOBOTIX cameras work with intelligent sensor technology and store data efficiently. **An automatic recording is started only when, for example**

### ... someone rings the doorbell

This way, the property owner knows who was at the door in his or her absence. Of course, the exact time of the visit will be recorded as well.



### ... someone was at the door

Who put the package in front of the door and when? A look at the list of recorded events is all that is needed. The motion detector in the camera starts the recording automatically.



### ... when the outdoor light goes on

The recording is triggered by external switch contacts or light sensors or by illumination sensors and IR motion detectors. The coupling to the light enables the camera to deliver high-quality images – even in the dark.



IR motion detector

## Playing Back Recorded Events

You can use an **IP video phone** or a **computer** to call up the events from the camera memory. It is not necessary to install any additional software on the video phone itself. The camera displays a basic operating menu created specifically for telephone keypads directly in the camera image. When using a PC as a remote station, MOBOTIX offers the **free-of-charge MxEasy software** for convenient setup and operation of the complete T24 system.

Video phone operating interface



MxEasy user interface (computer)

## Keeping Track Of All Alarms

The alarm search feature combines a host of functions that make it much easier to find specific events. You can also conduct searches using automatically synchronized time tracking. The event that triggered an alarm can be analyzed in more detail in the event view.



# RFID



**MxBus (Two-wire)**

Battery supply & access codes

## Contactless RFID Technology With Transponder

RFID facilitates the automatic identification of visitors and makes it easier to record and save data. An RFID system consists of a transponder (for example, card or key tag) as well as a device for reading the transponder ID (T24 keypad).



## Keypad With RFID Technology

Who is authorized into the building and when? The MOBOTIX key module can be used in many different ways. The module is **weatherproof in accordance with IP65**, meaning that it can be used along with the T24 for professional access control in outdoor areas. The key module enables access via **key codes** or keyless access using a



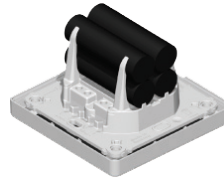
The keypad is also available for purchase individually

Double security with transponder and PIN code input

**transponder** (for example, as a check card or integrated into a mobile phone). The module communicates directly with the security door opener via MxBus and can be programmed with a **time control in MxEasy using the calendar function**. It can also be used as an individual module for securing adjoining rooms such as warehouses or VIP areas.

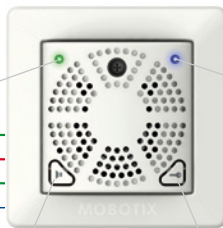
## Indoor Security Door Opener

The T24 door station should always be coupled with the MOBOTIX security door opener with decentralized access code memory because they make it **impossible to open the door by forcibly removing it and bypassing the connection cable of the T24**. The integrated battery (kept fully charged by the T24 using an MxBus cable) ensures that the door can be securely locked and unlocked, even in the case of a power failure. Indoors, the door opener can be on-wall or flush-mounted and thanks to the integrated **speaker**, it can also be used as a **doorbell**.



Battery for backup power supply: power for door opener and keypad at the outdoor station; door can be opened/locked using PIN/transponder, even during total power failure

Green/red LED displays the doorbell status and faults (for example, battery, MxBus cable)



The blue LED displays the door status when a visitor has rung the doorbell or left a message

Mute

Opening the door

The access code is encrypted and transferred from the keypad to the door opener and only then read out and confirmed once in the secure inside area before the door is opened.

The device is equipped with two colored LEDs for displaying the doorbell and door status (door contact, lock). It can be operated using two buttons: mute button for the doorbell (e.g., during vacations) and release button for the door lock.

## Securely Locked Doors

The door openers are normally supplied with power by the outdoor station. By sending signals directly to the electromagnetic door lock, they are not tamper proof. With the MOBOTIX door opener, it is not possible to bypass the connection cable.

# Integrated Message Function

## Notices Of Absence

The MOBOTIX IP Video Door Station makes your day-to-day activities easier with its integrated message function. The property owner can **leave an audio message** that is played back automatically when a visitor rings the doorbell. This works just like a telephone answering machine that only plays the audio announcement and does not enable recording.



**An example:** Mr. Wiseman works as a freelancer, so he meets with clients on a regular basis, also in his office. On busy days, he uses the message function on his MOBOTIX door station so that he doesn't lose clients – especially unannounced and potential new clients – right away. Each visitor who rings the doorbell receives the message that Mr. Wiseman is currently out of the office but that he will be available again on the following day at 9 a.m.

## Answering Machine

Alternatively, the property owner can choose to **give his or her visitors the option of leaving a video message with sound at the door station**. This function also works like a telephone answering machine but you can record a message. In addition, it also plays back a short message automatically when a visitor rings the doorbell. The message will indicate that the visitor can leave a video message with sound by pressing the button with the symbol of a letter.



**An example:** Now the delivery person or mail carrier can easily let the Wiseman family know that someone stopped by and that the package was left with the neighbors.

## Message Box

An additional, especially intelligent message function offers visitors the opportunity to **leave a personal message for a particular person**. This message is played back once that person enters their authorization via access module of the T24.



**An example:** Sometimes Mr. Wiseman would like to leave a message for his cleaning staff before someone cleans his offices. No problem: the T24 can play a message specifically for the card holder when the door is opened using the transponder code card.

## Multifunctional Keypad

The convenient message function does not have to be ordered separately. This feature comes with each keypad as a standard. The speaker, microphone, camera and memory of the T24 door camera are cleverly used as part of this system.



Hemispheric IP Video Door Station in silver. Additional colors (white, dark gray and amber are available)



The T24 key module with contactless RFID technology has an integrated message function (blue letter button).

The messages are recorded and played back via the camera's integrated microphone and speaker. The data is stored on the camera's MicroSD card.



### Playing Back Messages

If a visitor has left a message for the property owner, it will be indicated by a flashing LED on the T24. The message can be played back at the door station after the appropriate person has entered the security code. Video messages can be played back at any of the remote video stations.

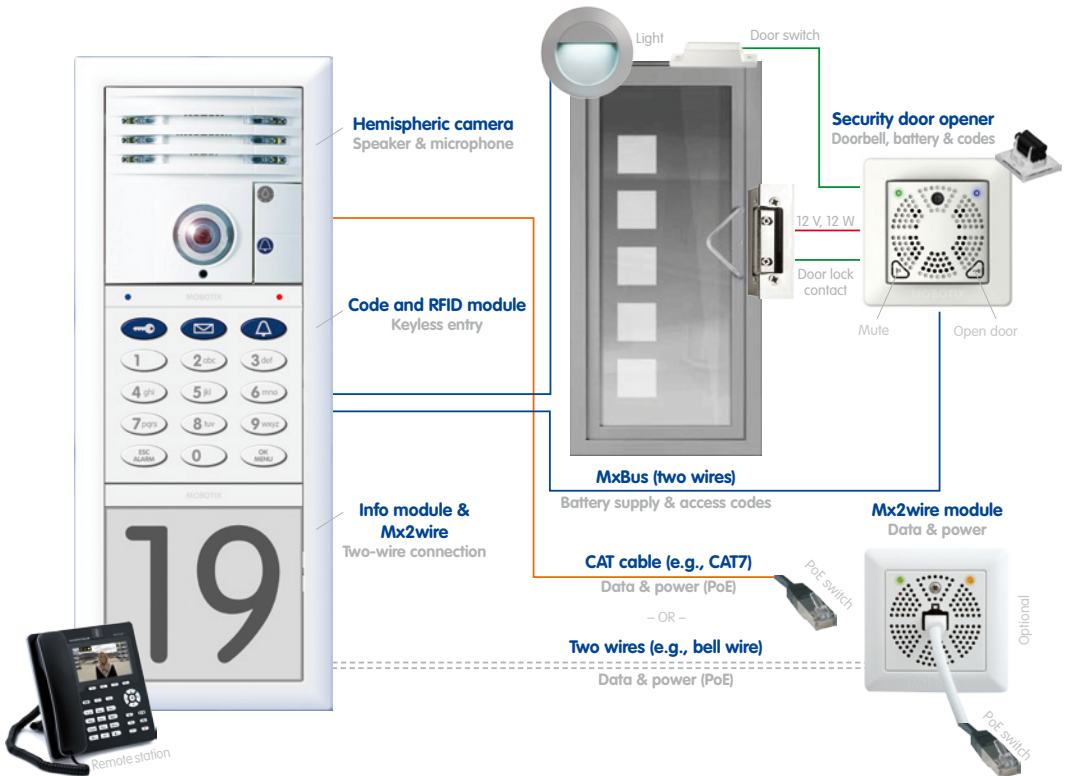
# Simple Installation – System Overview

## T24: Build A Network Quickly, Easily And Cost Effectively

First-time installation: CAT cable

Renovation/reconstruction: bell wire + Mx2wire

What does a typical system look like and what kind of cabling is needed? The system image shows the schematic structure of an access control system with the T24 including the Hemispheric camera, keyless entry, info module and an additional security door opener from MOBOTIX for inside installation next to the door. The T24 **network connection and power supply** are supplied via an **Ethernet cable** (PoE technology) or alternatively using the **Mx2wire** expansion set via a two-wire **bell wire**. This way, the existing doorbell or simple door intercom system can be replaced by a versatile access control system with a high-resolution MOBOTIX door camera with little extra effort or cost.



## Fast, Simple Installation

In new constructions, MOBOTIX recommends connecting a CAT7 cable directly to the door station. In renovations of older buildings, the existing bell wires can be used further together with the Mx2wire technology (also with Siedle Variot).

### Simple Connection Of Individual MOBOTIX Modules

The T24 outdoor station requires **just one cable for data and power** (via a CAT cable or two wires with Mx2wire) to connect to a PoE switch and thereby to any expandable Ethernet network. In addition to the outdoor station, you can also install additional modules indoors that can connect to the T24 over the network via a switch or MxBus. In this way, the keypad is also the perfect access module for adjacent spaces or rooms. Or you can use a transponder card to switch the alarm system in the building on and off. Additional MOBOTIX modules are currently in development.

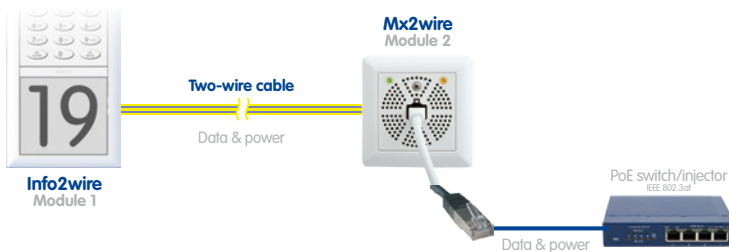


### Info Module With Mx2wire Technology (Renovation/Older Buildings)

The MOBOTIX info module for the T24 outdoor station is not only a weatherproof module with a backlit house number field lit by economical, long-lasting LEDs. It can also be ordered with an optional Mx2wire unit. This unit is needed if the T24 is to be connected to the PoE switch with an existing bell wire via a second Mx2wire unit instead of directly using an Ethernet cable.

*Use of existing bell wire saves on additional cabling for door station*

The Mx2wire technology was developed by MOBOTIX and is characterized by the fact that it is able to transfer data and power simultaneously using two-wire cables such as bell wire, coaxial cable, etc.



*MOBOTIX Mx2wire system image*

### Hemispheric Video For Siedle Vario

The T24 modules were engineered by MOBOTIX to be retrofitted into the Siedle Vario module system at little additional effort and cost. The individual Siedle modules are integrated into the system using a specially-developed MOBOTIX IO terminal board that can be clicked directly into the Siedle module located directly below the MOBOTIX camera module. MOBOTIX offers the modules in four Siedle colors.



*Affordable upgrading for Siedle Vario owners (also with Mx2wire technology)*

### T24 Camera Fits Into The Siedle System

The camera module of the T24 IP Video Door Station physically fits into the Siedle Vario module system and can be used with most modules such as doorbell keypads, motion detectors or lights via a special terminal board.

## Custom Modular System

The T24 is based on a modular system that can be adapted to suit the customer's individual desires as required. Because of this, the T24 system is suited for both private and commercial use. This highly robust and weatherproof outdoor station (IP65, suited for -30 to +60°C, or -22 to +140°F) is available in four attractive colors: white, silver, dark gray and amber.

Available colors:  
white, silver, dark  
gray and amber



The Hemispheric T24 camera module with compatible installation frame is an affordable, ready-to-use starter door station, thanks to its integrated doorbell and light buttons, the high-quality microphone and the powerful speaker.



MOBOTIX offers solutions for one, two or three modules in flush-mounted or on-wall models. The sturdy frame can be ordered with an optional integrated anti-theft device that prevents the modules from being removed easily.

## Standardized Network Technology

Connection to the T24 is established using a normal computer network and not using a video cable. This has the advantage that access can be granted from anywhere in the world using affordable standard fiber optic, copper and wireless IT components.



## Planning And Ordering

The path to your fully-installed MOBOTIX T24 IP Video Door Station leads from the electronics wholesaler to the electronics specialists and technicians all the way to you, the end customer.

You can use the T24 web configurator tool on the MOBOTIX website to plan your individual T24 door station. You can choose the individual components step-by-step so that no individual component is forgotten. After you have finished the configuration, the system creates a preview image of the system as well as a parts list so that a concrete offer request can be sent to the electronics specialist contracted to install the system.



The web configurator can be found at [www.mobotix.com](http://www.mobotix.com) under Products > Video IP Door Station > Configurator.

## Software Included

MOBOTIX customers always receive custom software for system setup and operation, completely free of charge. The T24 can be easily operated using any standard PC or SIP video phone and it functions worldwide via an Internet connection.

# Video Phone Remote Station

## MOBOTIX Recommends Grandstream

MOBOTIX recommends the GXV3140 from Grandstream as an effective remote video station for the T24 door station. The powerful IP video phone features high quality images delivered on a large color LCD display. The telephone is equipped with a wide range of features including numerous multimedia functions. The full duplex speaker phone is equipped with an acoustic echo canceller for noise suppression.

The Grandstream GXV3140 can be ordered directly from MOBOTIX.

### Video Phone Start View

Once communication has been established between the camera and Grandstream (for example, using the doorbell), the camera image appears automatically along with the basic functions (submenu top right).



### Expanded Live View

By pressing the key next to the symbols in the start view, you can activate a main menu for selecting more basic functions (for example, the event player, vPTZ and image settings).



### Digital PTZ Feature

Using the magnifying glass and arrow symbols, you can digitally increase/decrease the size of the current image section and move it in any direction so that no detail is overlooked.



### Status Display In The Image

The T24 status display is at the top left. The symbols display, for example, whether the door is locked, whether the external light is on and whether the record function of the camera is activated.

## T24 User Menu Directly In The Image

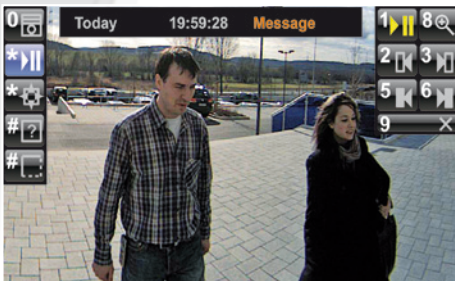
The video phone used for the T24 displays an intuitive MOBOTIX-specific user menu that can be controlled using the telephone's keypad, making it easy to configure and operate the T24 Door Station right in the palm of your hand. The menu is controlled using the 12 buttons of the phone (0, 1, 2 – 9, \* and #). The current key assignments can be shown on the display, so that the user does not have to memorize any keys.

Please note that due to software updates, some of the images in the following examples may be subject to change.



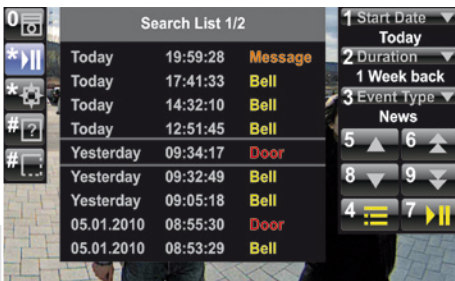
### Changing View/Camera

This function enables you to switch between predefined views for one or more cameras all at the touch of a button (for example, for two door stations).



### Event Playback

A menu is displayed for intuitive operation of the player function for playing recorded video clips with sound or scrolling back and forth through single images.



### Event Search

You can do a specific search through the recorded events using the list provided. The list shows who rang the doorbell (bell), left a message (message) and/or opened the door (door).

### Practical Help Function

The # opens the help function for the main menu that is currently selected. The help text gives a short description of the exact meaning of the key symbols located in the submenu.

**DVR:** Abbreviation for Digital Video Recorder.

**Events:** An event refers to a situation when something happens or changes. In terms of video surveillance, this means a change in the status of an area that is being monitored. This may be movement of a person, a change in brightness, a drop in ambient temperature, the detection of a noise via a microphone, an electrical signal at a signal input, the manual operation of a button, etc.

**Ethernet:** The most common technology for communication within a wired network. It facilitates data exchange between all devices (computers, printers, IP cameras, etc.) connected in a local network (LAN).

**Flash memory:** See microSD card.

**Frame rate:** The frame rate specifies how many frames per second (fps) are generated and sent by the camera. 12 fps and higher is perceived by the eye as a smooth video sequence.

**G.711:** G.711 refers to the process by which analog audio signals are encoded and decoded. This codec (= enCOder-DECoder) is used in classic telephone systems and IP telephony.

**H.264:** H.264 is the process by which the video image is encoded/compressed and decoded.

**HiRes:** Abbreviation for High Resolution. Refers to high-resolution images (above 1 megapixel).

**IP network:** Data network based on the Internet protocol (TCP/IP).

**IP telephone:** See VoIP.

**IR:** Infrared sensor for motion detection.

**LED:** Abbreviation for Light Emitting Diode. An electronic semiconductor component built into MOBOTIX cameras and add-on modules that emits light when a current flows through the component in the correct direction.

**Megapixel:** Images that have more than 1 million pixels.

**MicroSD card:** SD Memory Card (Secure Digital Memory Card). A digital storage medium based on flash storage modules such as USB sticks.

**Motion detection:** Action of sensing a movement within a particular area. MOBOTIX cameras use algorithmic methods to detect changes from image to image in predefined areas, while taking preset conditions into account. If a camera detects a movement, it signals an event and triggers an alarm.

**MxEasy:** Free-of-charge MOBOTIX video management software for small and compact camera networks of up to 16 cameras.

**MxPEG:** Method developed by MOBOTIX to compress and store image and video data with low network load and high image quality. The MxPEG ActiveX control element allows video and audio data from MOBOTIX cameras to be displayed in other applications (including Internet Explorer).

**Network:** A group of computers that are connected via various cables and share access to data and devices such as printers and IP cameras.

**PIR:** Passive infrared sensor for motion detection.

**PoE:** Power over Ethernet. A technology for supplying network-enabled devices (for example, IP cameras) with power via the Ethernet cable.

**PTZ:** Abbreviation for Pan/Tilt/Zoom. Refers to the movement of a video camera to the left and right, up and down, and to the camera's ability to enlarge an image.

**Resolution:** Indicates the number of pixels used to produce an image. The more pixels an image has, the more recognizable the details remain when the image is enlarged. The resolution is expressed as the number of pixel columns by pixel rows or as a total number of pixels. A VGA image has 640 columns and 480 rows (640 x 480 pixels), which equals 307,200 pixels or approximately 0.3 megapixels.

**RFID:** Radio frequency identification.

**Router:** Network device that connects multiple networks with one another. The router establishes a physical connection between the devices in different networks (like a hub), analyzes the relevant data packets and forwards ("routes") these packets to the correct target network.

**Search:** Monitoring of recordings or searching for a particular event.

**SIP:** Session Initiation Protocol. Network protocol for setting up, controlling and terminating a communication connection via a computer network. SIP is frequently used in conjunction with IP telephony.

**Switch:** Hardware used to connect multiple network devices (computers, cameras, printers, etc.) within a network. A PoE switch can also supply the cameras with power over an Ethernet cable.

**Transponder:** A transponder is a device used for wireless communication (for example, as a key tag or a check card). The device detects the incoming signal and automatically responds to it or forwards it. The term "transponder" is made up of the terms "transmitter" and "responder." Passive transponders do not require their own power source, but they only work over short distances.

**VoIP:** Voice over IP. Telephony using computer networks.

**WLAN:** Wireless Local Area Network. Used to provide Internet connections without the need for cables.

## Complete HiRes Video Solutions

high-resolution, digital & cost-effective recording



**MOBOTIX**

### HiRes Video Innovations

The German company MOBOTIX AG is known as the leading pioneer in network camera technology and its decentralized concept has made high-resolution video systems cost efficient. Whether in embassies, airports, railway stations, ports, gas stations, hotels or highways, MOBOTIX video systems have been in operation on every continent for years.

### Pioneer In Network Camera Technology

In just a short time, MOBOTIX has climbed to the second place in European market share and fourth place worldwide in terms of market share. MOBOTIX has been exclusively manufacturing megapixel cameras for many years now and with a market share of over 60 %, is regarded as the global market leader in high-resolution video systems. In the decentralized MOBOTIX concept, every camera has an integrated high-speed processor and, if needed, a digital memory (MicroSD/SD card) for long-term recording.

MOBOTIX cameras can make event-driven recordings even without a central PC or DVR and can digitally store videos long term with sound. This is why MOBOTIX solutions represent an unbeatably good value with their excellent image quality, even for small-scale installations.

### Free Consulting Service

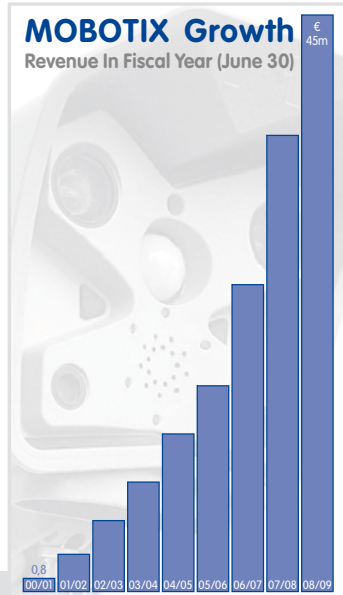
Simply call us or send us an e-mail. We will get in touch with you promptly.

With MOBOTIX, you're in the best hands right from the start. Both our internal project managers and our experienced, highly specialized partners make sure that every system is planned and installed optimally. Our support specialists can help you with any technical questions you may have.

You can also consult your electrician or IT technician

### MOBOTIX Growth

Revenue In Fiscal Year (June 30)



### MOBOTIX Training Programs and Seminars

MOBOTIX has its own training center with an extensive offering for all interested parties, customers, partners and security companies. MOBOTIX offers seminars for basic and advanced users. For more information: [www.mobotix.com](http://www.mobotix.com)



**MOBOTIX AG**  
Security Vision Systems  
Kaiserstrasse  
67722 Langmeil  
Tel: +49-6302-9816-103  
Fax: +49-6302-9816-190  
E-mail: [sales@mobotix.com](mailto:sales@mobotix.com)  
[www.mobotix.com](http://www.mobotix.com)



